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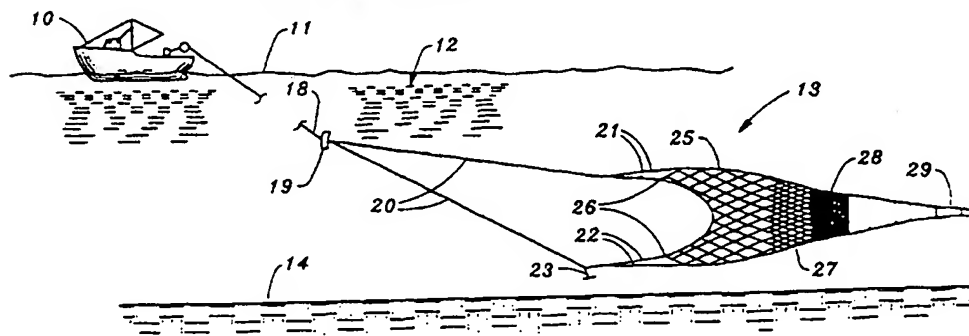


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(54) Title: TRAWL SYSTEM CELL DESIGN AND METHODS

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(57) Abstract

A mesh cell construction which is systemized wherein opposite mesh bars of the rectangularly shaped mesh cell have a common lay direction when viewed in an axially receding direction (either right-handed or left-handed lay) that is opposite to that associated with the remaining opposite mesh bars of such mesh cell. In another aspect, when incorporated in a trawl (13), such cell construction of the invention provides for improved shaping and performance of the trawl (13) wherein the mesh cells of different geometrical locations positioned relative to and about the longitudinal axis of the trawl can be controlled such that resulting trawl panels wings (25) act analogous to a series of mini-wings capable of acting in concert in operation. Such concerted action provides, when the trawl is in motion, outwardly directed force vectors which significantly increase the trawl volume and hence mouth (26) volume while simultaneously decreasing drag.